

DAVID A. DIEHL
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TECHNICAL SKILLS:

- 24 years continuous software engineering design and development.
- Worked as technical lead on several high profile projects.
- Technical architect on several projects.
- Ran own consulting firm for several years.
- 5 continuous years C# .Net
- 20 years SQL
- 5 years C++, 5 years C
- 17 Straight months of practical experience with Agile methodology.

PROFESSIONAL EXPERIENCE:

Various Clients
Consultant

Oxford-Jabil Circuits

Sept 2008 to Current

- Was part of a team responsible for developing a manufacturing floor application. The application controlled all aspects of shop floor orders. The application utilized the Smart Client Software Factory (SCSF) and Component Application Block (CAB) frameworks. The backend database was SQL 2008 and the middle tier was WCF, LINQ and Com+.
- My responsibilities included architecting major pieces of the overall shell, and writing several of the smart part / work items.
- Team foundation server was utilized for source code control and unit test construction. All coding was C#. The .Net framework was 3.5. Infragistics Net Advantage 2007.

Midcom-Raytheon

June 2008 to Aug 2008

- Completed two internal C#/ASP.net projects for Raytheon.
- Worked in conjunction with one other developer in order to complete all aspects of these projects.
 1. The first project was a scheduling and work order tracking system for factory building maintenance.
 2. The second high profile project involved writing a complete learning management system in under 8 weeks. The learning management system facilitated the administration and assessment of company policies. I was responsible for the overall design of the database schema, data access layer generation, UI development, and key business tier components including authorization and authentication components.
- All development was in C#, ASP.NET and SQL-Server 2005. I administered and created the source safe project.
- Worked closely with the project sponsor, business analysis and testing team. All members of the team were remote, utilized collaboration tools such as lotus sametime, screen sharing, virtual document areas.

Meridian-Wachovia

May 2008 to June 2008

- Worked for Meridian consulting on a project for Wachovia bank.
- Architected and designed a new ASP.Net front end for CD promotional systems. My responsibilities were to design the UI for the system.
- Programming was in ASP.NET 3.0 and C#.
- *Reason for short term is they wanted to convert to full time and I didn't accept

FKQ

March 2008 to May 2008

- Was developer responsible for development of Dollar/Thrifty BtoB website. Development was done using ASP.Net/AJAX, C#, MS-SQL. System was designed using DataAccess layer, Business Layer, Provider Model. Wrote many user controls.

Price Waterhouse Cooper Center for Advanced Research **Sep 2007 to March 2008**

- Worked as a developer on the rollout of PWC's new Auditor Workspace product. The purpose of this project was to support PWC auditors with audit workflow, document management and decision support. The product features sophisticated data synchronization services and tight integration with a variety of back end web services.
- Provided web service integration to an array of SQL backend databases and Lotus Domino databases. Was involved in overall design of web service architecture.
- Worked with front -end developers to define and access the web service layer.
- Development was done in C#, ASMX, ASP, and the Lotus API.
- Utilized the Agile methodology and worked extensively with Microsoft's Team Foundation Server.

Clarity Medical Systems

Jul 2007 to Sep 2007

- Hired as technical architect in charge of designing and implementing medical integration protocols into Clarity's medical imaging system.
- Position required thorough understanding of real time device IO, synchronize/asynchronous communications over custom buss protocol and custom web service proxy usage.
- Position required knowledge of PACS, and DICOM.
- All development done in C# 2.0. Required sophisticated inter-process debugging and advanced unit test case development.
- Formally designed offline exam/image store forward system.
- Formally designed integration sub-system.
- Developed unit test cases.
- Integrated finished solution into the system.

Price Waterhouse Cooper Center for Advanced Research **June 2006 to Jul 2007**

- Lead analyst/developer responsible for the enhancement of a complex fraud detection system. Sophisticated statistical algorithms tracked trends and found anomalies in general ledger and sub-ledger transactions.
- Development tools used include ASP.NET (2.0/1.1) including AJAX, ASMX-web services, XPATH, XSLT, and Oracle-PL-SQL. The system contained over 5000 lines of C# code.
- Skills required included strong object oriented design, knowledge of design patterns, the ability to write sophisticated web pages and web services using ASP.NET and AJAX.
- Position required the ability to work independently, solve complex problems and communicate complex ideas to a variety of users.
- Utilized Agile methodology.

Catapult – Microsoft gold certified solution provider

Dec 2005 to May 2006

- Part of a team responsible for re-writing entire Hillsborough country traffic court system. The scope of this application included ticket intake processing, cashiering and in court activities.
- Development tools included Visual Studio 2005/Team, WinForms/Infragistics based on the Component Application Block, Windows Communications Foundation (WCF) and SQL server 2005.
- Coded several UI component grids based on CAB, an image viewer application that utilized GDI++ and an interface to the web service version of Documentum.
- Position also required advanced knowledge of SQL Server and T-SQL .

Marriott Vacation Club International

Sep 2005 to Dec 2005

- Was part of a team responsible for delivering a web service interface to existing line-of-business applications. The SOA services were intended as an interoperability layer between various legacy systems.
- Position required a thorough understanding of XML, SOAP, XSLT, C# and ASMX. The architecture of this system provided similar functionality to BizTalk. Features included Logging, Dynamic Routing of message, queue analysis and message re-formatting.
- Position required complex cross-machine debugging of webservice calls.
- Position also required through understanding of Oracle and PL/SQL.

Alliance Data Systems

Mar 2005 to Sep 2005

- Responsibilities included re-writing large pieces of a batch processing system for invoices and general correspondence, making modifications to a WinForms based CRM system, making modifications to a CRM web-form applications.
- All programming was done in C#, .NET 1.1 and Oracle PL/SQL.
- Coded both WebForms(ASP.Net) and WinForms applications and utilized several of the Microsoft Enterprise Application blocks including UIP block, Data-Access block and MS-Exception block.

Fortis Software - Microsoft gold certified solution provider Mar 2004 to Mar 2005

- Technical architect/program lead for innovative electronic cash payment system. Product competes against alternate payment processing systems such as PayPal.
- Product uses a state of the art winform/webform UI with heavy Flash for graphics.
- Back-end data access layer is a combination of .net web services and remoting.
- Heavy use of XSD, XML, SOAP. Exposure to BizTalk. All programming was done in C#.

Aspen Marketing

Jan 2004 to Mar 2004

- Developed C#/.NET applications for the largest US based privately held marketing company.
- Completed several sophisticated web based grids, coded advanced mapping applications that utilized Microsoft Mappoint web services (SOAP/XML), coded project tracking application, coded PDF overlay system that could overlay text and images on existing PDF docs.
- Extensive use of .NET framework classes, the C# language, and SQL server including stored procedures.

Navy

Mar 2003 to Dec 2004

- Technical leader of joint Airforce/Navy pilot training system. System was written in VB/VC++/SQL Server and contained over 1 million lines of COM based code.
- Managed seven VB/VC developers. Scheduled tasks, builds and QA/QC coordination.
- Managed the development of several .NET projects including a messaging collaboration system, XML/XSLT/XPATH parser and time tracking application.

- Used .NET extensively including VB.NET, ASP.NET, and C#.
- Current experience with SOAP SDK 3.0, SOAP/WSDL/UDDI
- All Database work was in MS-SQL

Softpod Development Corp., Dayton, OH

March 2002 to Feb 2003

Owner

- Designed and coded a HTTP to NNTP binary bridge. Major components of the system include a socket service that utilizes overlapped IO, a cache manager service which talks to a SQL database via ADO, a multi-threaded article retrieval process and a sophisticated CGI script that implements a proprietary programming language called Podulous. The system makes use of Microsoft's named pipes for IPC between two of the processes. Also coded a credit card gateway interface and all the web pages in ASP.NET.
- The following programming concepts and API's were essential to coding News-Gate. TCP/IP, critical sections, events, shared memory, overlapped IO, mime-types, encoding/decoding algorithms, language interpreter/compiler design, ASP, ADO, HTTP, HTML and the CGI protocol.
- The socket architecture was developed using Async IO as its basis. The service takes incoming socket transactions requests and dispatches them out as outgoing socket requests. Multiple state machines are used in this design and throughput and reliability are paramount. To achieve this goal formal testing scenarios had to be coded in an effort to find weaknesses.

Also worked on several external projects including 2 short term engagements as follows:

- Schlumberger - Worked on a project comprised of 4 developers and a team-lead in the development of an oil-well bore-hole analysis software tool. The software utilized sophisticated 3d and 2d views along with both database derived and real-time derived data streams. My role in the project was to enhance and coordinate the user-interface, which was written in Visual Basic 6.0. All non-U.I. related components were written in C++ / COM. The position required a thorough understanding of Visual Basic, C++, and COM. Position required good understanding of Direct-X as all 3d code utilized it.
- GateLinks - Worked on a team of six developers and one manager in the development of a win-32 based kiosk system. Analyzed Microsoft's .NET SDK and runtime to help management make a decision as to whether to use it as the basis of the companies OLTP engine. Position required installing, analyzing and reporting on the .NET framework, CLR, and .NET class libraries. Ran tests against SQL server comparing the performance of ADO.NET versus ODBC and native ADO.

VARIOUS CLIENTS

Oct 1996 to Feb 2002

Wright Patterson AFB, Dayton, OH

- Was part of a 2-person team responsible for the design and development of a data warehousing system. The projects goal was to replace the Cobol/mainframe legacy systems that were currently running the entire military logistics systems operations.
- Project responsibilities included putting into place a real time ETL processes utilizing the Informatica Power Center tool. Other responsibilities included writing UNIX and Windows based C code to aid in the data transformation process. Extensive UNIX

shell programming along with standard TCP/IP services knowledge was required. C programming was done using HP C compilers, linkers and debuggers.

- Position required a great deal of interaction with existing legacy programmers. It also required detailed analysis of existing data flow and processes.
- Analysis and documentation of existing data files, process flows and COBOL programs was necessary.
- Developed PowerPoint presentations to communicate with peers and management.
- A thorough understanding of SQL and query optimization was needed for this position.
- Attended two weeks of Crystal Reports training.

Eagle Traffic Signals, Austin, TX

- Was a part of a 3 person team responsible for the design and implementation of a real time traffic control system. The system monitored and controlled traffic for the entire metropolitan Washington DC area.
- Wrote a multi-threaded, out of process NT service that handled transactional updates from a real time traffic controller. Formatted and passed these transactions on to various real-time upper-level components.
- All code was written using Visual C++ and the ATL/STL class libraries were used extensively. Worked great deal with the MSXML components.
- Expert level COM experience was needed in this position.

Eye Wonder, Atlanta, GA

- Was part of a 6 person team responsible for designing and developing a video streaming product.
- My responsibilities included coding a NT service that provides TCP/IP based multicast and unicast video streams. This high performance server was built to handle a variety of service modes and was tested to scale to thousands of streams.
- Wrote various Video for Windows applications for media file manipulation including translation of bit rates and stereo to mono conversions.
- Was responsible for analyzing the Direct-X / Direct Show filter architecture to determine how the products codecs should be designed. All programming was done in Visual C/C++, ATL, STL, and WIN32.

Dell Computer Corporation, Austin, TX

- Inherited all responsibilities for the development and maintenance of an internal project tracking system for Dell's peripheral group. This intranet-based application was entirely written in VB-Script, C++, ASP, ADO and Oracle-8. The project employed a heavily modified version of the Objective Grid Active-X control and data was passed over the wire as an encoded byte stream for it.
- A strong working knowledge of SQL, MFC, and web-based development using ASP/ADO was necessary for this project as well as the ability to communicate effectively with the business team and support personnel.
- Formal iterative design and phased release cycles were followed.
- Was responsible for all aspects of the design and development of this system and reported directly to the project manager.

M-Show, Austin TX

- Was part of an eight person team developing a virtual conferencing service.
- Designed and coded a NT service that provides remote automated control of telephony controllers. The service allows a multimedia show controller service to automate playing wave files, recording wave files, playing DTMF tones, recording DTMF tones, audio wave conversion, text to speech translations and other telephony functions.

- Coded IPC routines using the Microsoft Message Queue product. Also coded a UI based Active-X control that allowed for remote monitoring of all audio server activity and for operator assisted problem resolution. All components of this system were distributable and various remote IPC tools and designs were debated and tested.
- All programming was done using Visual C++, ATL/STL. Position required working knowledge of distributed computing protocols including DCOM, RPC, Sockets, Pipes, Queues and NT-security and impersonation.
- Strong OO programming principles were needed in this position.

Dell Financial Services, Austin, TX

- Was the team lead of a 3-person team responsible for architecting and coding an internal lease management printing system.
- Technology employed on this project included Oracle's C-Cartridges, along with VBA scripting. Extensive knowledge COM, VBA and Oracle 7 was needed.
- Reported directly to management in this position and was responsible for overall design and implementation.

Norwest Financials/Unisys, Des Moines, Iowa (Cue Data Services)

- Was part of a 4-person sub-project team whose responsibilities included the design of a set of TCP/IP C++ base classes that could be used to develop various communication services.
- All code was written in C++ and a major design objective was to maximize re-use by allowing a great deal of inheritance and overloading in the framework. Extensive object oriented design and coding were required for this position.
- All software was written using Visual C++ and both MFC and ATL were used.

Trilogy, Austin, TX

- Worked in the professional consulting services area on a three-member team. The projects objective was to take the Trilogy SCPriceManger software and configure it for particular customers. The software used an incredibly complex Object/Com model.
- Job entailed analysis, design and coding. Formal methodologies were used. All code was written using Visual J++ 6.0 and required use of an extensive existing Java class library.

Allstate, Chicago, IL

- Was part of a 5 member R&D consulting team brought in to develop an N-tier/web based OLTP framework.
- Designed application architecture for highly scalable, distributed, WEB based object repository. Position required extensive knowledge of Microsoft's Transaction Server, IIS, COM, DCOM, and ADO. Components were written in Java 6.0 and Visual C++ 6.0.
- Wrote many re-usable components in Visual C++. The components adhered to MTS interface standards. ATL/STL libraries were used.

Signature Group, Chicago, IL

- Part of a 4 member team responsible for the development of a transaction intensive retail oriented website.
- Prototyped a set of business objects to make clients current web sites more scalable, maintainable, and reliable. Objects were based on Microsoft's Transaction Server. Technologies utilized included ATL, C++, MTS, ADO, VBSCRIPT, DCOM and COM.

CNN, Atlanta, GA

- Was the sole developer of a customer service system for CNN's web division.

- Coded an object interface to Oracle 6, created a DB schema, and coded a sophisticated user interface. Position required extensive knowledge of Internet protocols, database design, and objected programming.
- C-level Oracle programming was done using PL-SQL.
- Expert level knowledge of C++/MFC was needed. Coded sophisticated user interface utilizing splitter windows, trees, multi-column list boxes and panes.
- All data access was written using Oracles CLI. Sophisticated SQL queries were written for this project.

Xcellenet, Atlanta, GA

- Was the project leader for this software development company with 3 programmers and a QA staff reporting to me. Was responsible for the Internet Agent product line. This product line provided state of the art web crawlers that gathered and distributed web site information for store and foreword transports.
- Tasks included design, code checks, product roll-outs, QA, employee reviews and other management functions.
- Position required in depth knowledge of COM, WIN32, C++ and various Internet protocols including HTTP, HTML, NNTP, FTP, TCP/IP, and SOCKETS.
- Was responsible for code reviews and critiquing C++ class design. All code was written using MFC and ATL/STL.

SPSS, Chicago, IL

Feb 1996 to Sept 1996

Developer (Permanent position, was laid off)

- Was part of a several member project team that developed low-level components for the SPSS statistics system.
- Responsibilities included writing an implementation of Microsoft's Active-X Undo/Redo specification. Other projects I worked included packaging SPSS graphics classes in an Active X control, and designing a data aggregation subsystem.
- Job required extensive knowledge of Object Oriented design, methodologies and patterns as well as extensive knowledge of COM interfaces.
- All coding was done using Visual C++ and MFC.

VARIOUS CLIENTS

Mar 1992 to Dec 1995

Consultant

Conoco Oil Company, Sugarland, TX

- Worked on a 3-member team responsible for modifying Oracle Financial for the energy industry. Specific responsibilities included adding EDI support to Oracle Financials programs (v.10.5) . Designed and oversaw the development of EDI-820, and 821 transaction sets. Also coded jib/jibe 810-819 transaction sets.
- Development was done using AOL, PL-SQL, and forms version 2.3. Strong working knowledge of financial accounting and relational data modeling was needed. Position required the ability to decipher complicated and extensive SQL queries.

Companhia International De Tecnologia, Recife Brazil

- Was a team leader responsible for the design and development of a document imaging system.
- Designed algorithms and programs to control and process results from optical recognition hardware. The system was used to analyze handwriting on checks for a clearing-house operation.
- Also acted as a mentor to other developers.
- Developed a C++ computer training curriculum and trained other developers.

Reynolds & Reynolds, Dayton OH

- Was part of a small development team responsible for delivering a packaged CRM program for hundreds of automobile dealerships throughout the United States.
- Programs were written in Visual C++ and MFC. Sybase stored procedures were used for all data manipulation. Responsibilities include designing and writing a custom form design module and a re-usable high level printing architecture. A strong working knowledge of relational data modeling and object oriented design principles was needed for this project. Position required in depth knowledge of Visual C++ and MFC classes.

AT&T GIS, Dayton OH

- Was part of a large programming team responsible for re-engineering AT&T business systems.
- My specific role was to analyze the impact of Microsoft's COM on the project and to make design proposals based on it. The project required knowledge of the Component Object Model, Structured Storage, Uniform Data Transfer, In-place Activation, and most other OLE 2 interfaces and sub-systems.
- All programming was preformed using Visual C++ and MFC.

Pella Windows, Des Moines IA

- Played a lead role in bringing on-line a packaged "window" configuration and pricing system. The system was to be rolled out to hundreds of Pella Window retail outlets. Extensive knowledge of MFC and ODBC was required to complete my assignments on this project.
- All programming was done using Visual C++ and MFC.

Harbinger EDI , Atlanta, GA

- Hired as a lead software developer for a packaged Windows based EDI software system. The system provided for data translation to and from various EDI transaction types.
- All programming was done in Visual C++. Raima's Object Manager provided object interface to DB-Vista.
- Extensive knowledge of Visual C++ and MFC were needed on this position.

British Telecom, Atlanta, GA

- Was a member of a small team of programmers whose responsibilities included implementing programs to perform real-time data conversions from 3rd-normal-form to 5th on an Oracle-7 database system.
- Position required in depth knowledge of Oracle's Pro-C and PL-SQL languages. Programming was done using Visual C++ and MFC.

Peachtree Software, Atlanta, GA

- Worked as a developer on an 8 man team whose responsibilities were to code Peachtree Accounting for Windows Development was done in the C programming language with ANSI standard SQL. Platform independence was stressed.
- Designed and coded the DDE-ML subsystem and import/export subsystem. Utilized Microsoft's SDK. All programming was done using the Visual c++ compiler.

American Express, Phoenix AZ

- Was a part of a large development team responsible for implementing a customer service system for large operation centers.
- All programming was done in C. Development was done on RS6000's with AIX and X-Motif. The system interfaced to CICS via HILLAPI.
- Coded many transaction types on this project.

Distributed Information System, Dayton, OH

Mar 1990 to Mar 1992

Owner/President

- Ran two medium scale software development projects. The first project was a Windows based job-tracking system.
- All programming was done in the Actor language with a Btrieve NLM database server. The second project was a customer service project that included job tracking, estimating, invoicing and inventory control. This system was written in Clipper 5.0.
- Was also in control of all aspects of this company including marketing, project management, and finance. Had 4 other employees.
- Provided consulting to several fortune 500 companies on subjects such as object oriented development and client/server platforms.

Cap Gemini

Aug 1985 to Mar 1990

- Since graduating college worked on projects at NCR including NCR's engineering and manufacturing division in Columbia, S. Carolina, and their world headquarters. Worked in a variety of languages including C, Progress, and COBOL.
- Projects included a PC version of LU6.2, an EDI mapping program, and a world-wide purchasing system.

EDUCATION:

- Graduated from Ohio University in 1984. Obtained Bachelors degree in Computer Systems. Minored in Computer Science.
- Pursued but did not complete MBA, University of Dayton.